



ORD Innovation

Presentation to the EPA Science Advisory Board

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ORD Innovation Strategy

Shifting from individual projects to a systematic approach developed jointly with the National Program Directors and ORD scientists

What?

Support innovation at the bench in ORD laboratories

By fostering a dynamic work environment that rewards and recognizes creative problem solving

Demonstrate the power of transdisciplinary research

Learning how to connect scientists in new ways and engage practitioners and users

Use open innovation to broaden network of environmental problem solvers

Bring in new ideas and creative solutions from external scientists and others

Showcase research that exemplifies the principles of Path Forward

Expand understanding of innovative research and sustainability

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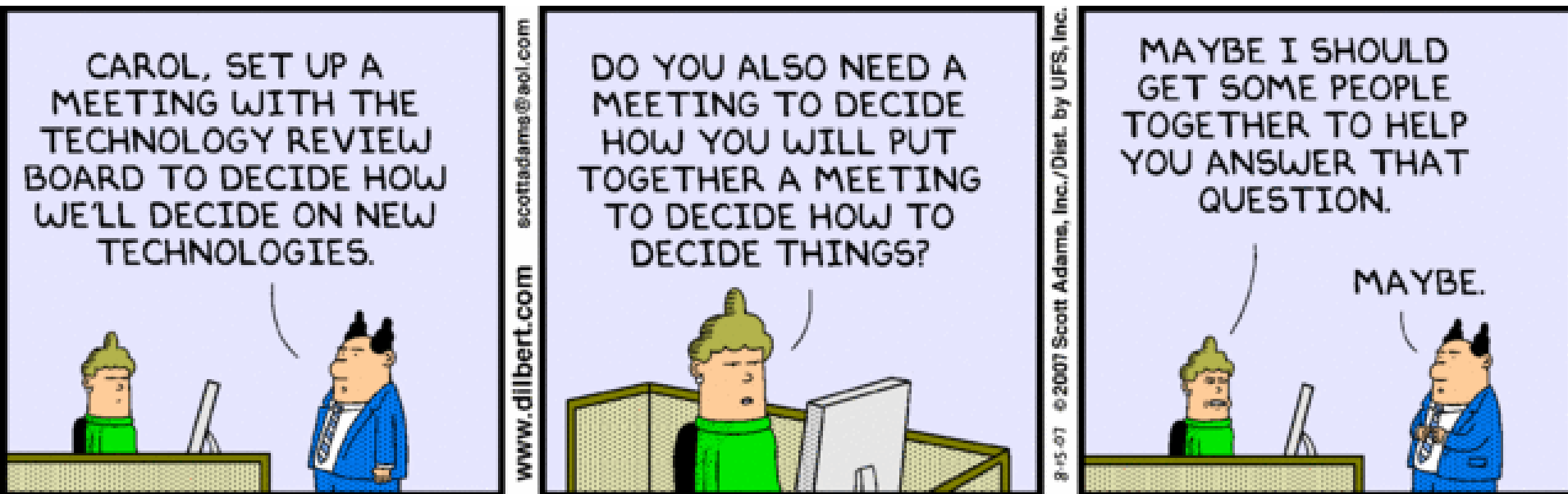
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How?

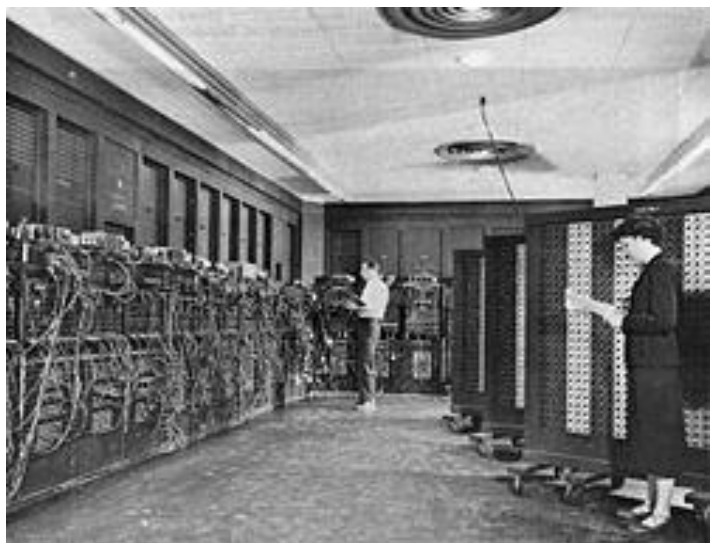
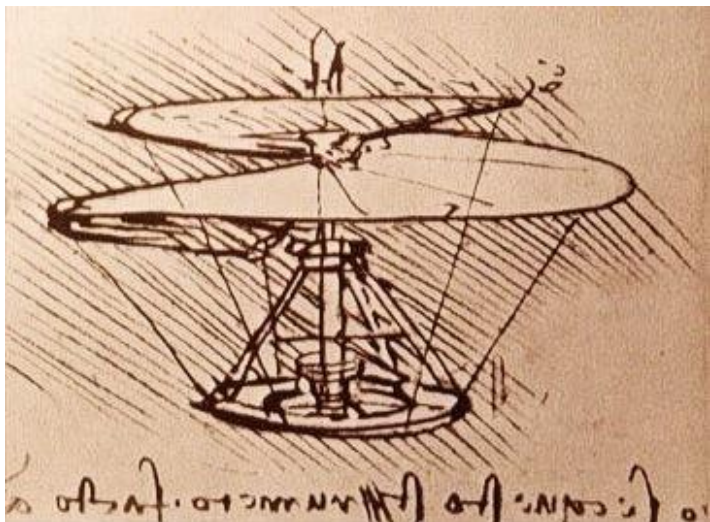
- *Pathfinder Innovation Projects*
 - *Innovation in Research Plans*
 - *PeerOvation Awards*
 - *Apps and Sensors for Air Pollution (ASAP)*
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- *Within ORD (IdeaScale)*
 - *Federal Environmental Research Network*
 - *Design Labs*
 - *Apps and Sensors for Air Pollution (ASAP)*
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- *InnoCentive and TopCoder challenges*
 - *Challenge.gov*
 - *Partnering with OSTP, NASA, HHS, DOD*
 - *Apps and Sensors for Air Pollution (ASAP)*
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- *Signature projects*
 - *Pathfinder Innovation Projects*
 - *Apps and Sensors for Air Pollution (ASAP)*

We need your help



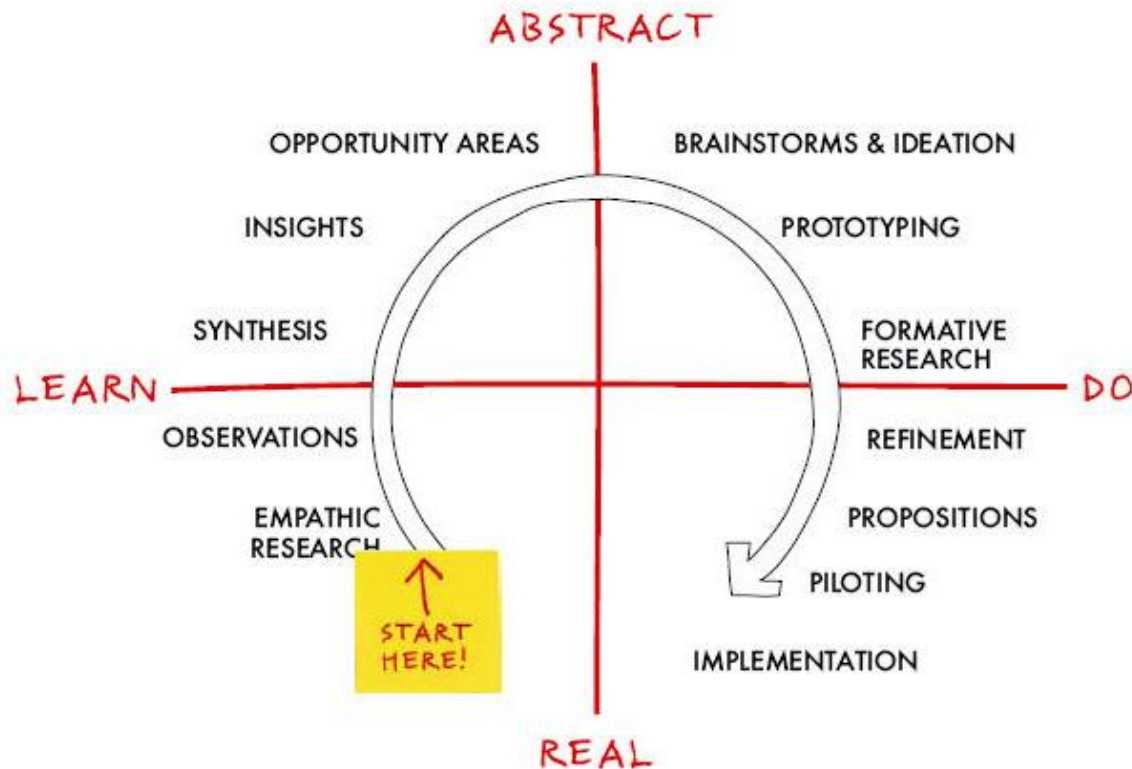
How can the SAB help foster Innovation in ORD?

Encouraging Innovation



Applying Design Thinking

“Design thinking is inherently about creating new choices, about divergence...In order to innovate, **we have to have new alternatives and new solutions to problems**, and that is what design can do.” - *Tim Brown, Chief Executive of IDEO*



Measuring Innovation

"The measure of success is not whether you have a tough problem to deal with, but whether it is the same problem you had last year."

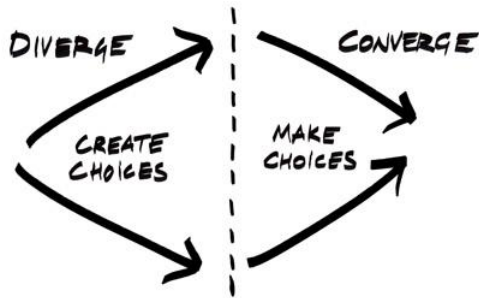
-- John Foster Dulles, Former Secretary of State



"Sometimes when you innovate, you make mistakes." – *Steve Jobs*

How can we...

better **encourage** innovation in the labs?



best **apply** design thinking in ORD research?



best **measure** Innovation in ORD?